GAP, Farmers and Field Realities:
Making the connection through better
IPM education and utilization of novel
options for pest management



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A Presentation prepared for the "FAO-Thailand Workshop on Good Agricultural Practices (GAP) for fresh fruit and vegetables"



### **Outline Presentation**

- Introduction: some facts related to GAP, food safety and pesticide use in Thailand
- 2. Overview of FAO Regional Vegetable IPM Programme and current Integrated Pest Management (IPM) work in Thailand in relation to GAP
- 3. Notes on Pest Management in GAP



# Introduction: some facts related to GAP, food safety and pesticide use in Thailand



### Key facts:

- ➤ Thailand leading food producer and marketed as such world-wide (Kitchen of the World campaign)
- Various labeling and certification schemes in place, GAP protocols issued, pesticide regulatory framework and pesticide residue analysis facilities in place
- ➤ Thailand implements Integrated Pest Management training through its DoAE and associated partners (DoA, RPF, DANIDA IPM)
- Thailand regional leader in research/development and production of novel options for pest management, including biocontrol options



### Key facts:

#### Nevertheless.....

- Majority of farmers continue to exclusively rely on pesticides to manage pest problems
- Confirmed with general rise in pesticide imports
- Farmer pesticide poisoning wide-spread and generally under-reported
- Pesticide residues raise food safety concerns for domestic consumers and pose trade impediments for export crops



# Programme and current IPM work in Thailand in relation to GAP



## The FAO Regional Vegetable IPM Programme in Asia (Phase II: 2002-2007)



### Scope and Rationale for the FAO IPM Programme

- ➤ Rampant misuse and overuse of pesticides in vegetable production in tropical Asia provide the rationale for establishment of FAO Vegetable IPM Programme.
- ➤ The FAO Vegetable IPM Programme is focused on the Greater Mekong Subregion.
- ➤ The FAO Vegetable IPM Programme has, since 1996, worked with governments & NGOs to develop robust National *Vegetable* IPM Programmes;



### Scope and Rationale for the FAO IPM Programme

- ➤ National Programmes carry out applied research, extension and farmer education activities to promote and support the development and application of vegetable IPM by Asian smallholder farmers;
- ➤ Focus on development and application of IPM for major cash crops (tomato, cabbage, eggplants, legumes, cucurbits, potatoes, okra).
- ➤ The standard training approach employed in all FAO supported National IPM Programmes is the so-called 'Farmers Field School' (FFS) approach.



### What is a Farmer's Field School?



- The primary learning approach used in educating farmers about IPM;
- "School without walls", farmers learn about crop ecology and pest management in the field;
- Season-long, from seed to harvest, 25-30 farmers
- Aim to help farmers produce safer vegetables and more efficiently through IPM.



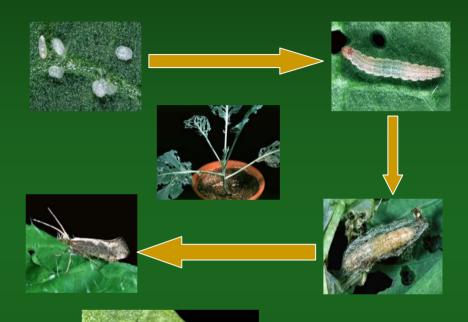
## Examples of IPM farmers connecting to GAP and safe food marketing channels

- ➤ IPM vegetable farmers and links to Green Food marketing in China PR
- ➤ IPM vegetable farmers and Government Safe Vegetable programmes in Vietnam
- ➤ Innovative collaborative IPM for Processing Tomato in Philippines, with key private sector involvement
- ➤ Farmer groups participating in cabbage IPM in Thailand linked to organic (Royal Project) marketing channels



### Example: Cabbage IPM in Thailand

- Diamond Back Moth (DBM) remains a key pest problem in cabbage production in the Highlands, triggering frequent and toxic pesticide applications.
- Experiences in highland production areas elsewhere in Asia demonstrate that effective parasitoids can bring DBM under control with limited need for additional intervention with BT sprays, mostly targeted for other lepidopterous pests.
- Collaborative effort in Thailand for introduction and use of parasitoids in cabbage production in Doi Angkham and Phethabun, linked to farmer education and safe food marketing channels.







# S Notes on Pest Management in GAP



### Notes on Pest Management in GAP

- > Avoiding pesticide residues is a primary objective of GAP
- Pest Management Section of GAPs is paramount to achieving this objective
- Farmers need to know what to do and how to do it
- > This requires:
  - IPM training
  - access to inputs such as pest resistant varieties, biological control inputs, bio-pesticides, etc



### Suggested questions for WG discussion

### 1. WG on Training

To what extent are IPM training and GAP training effectively connected? Is there a need for further development of linkages?

### 2. WG on Relevance of EurepGAP for Thailand

Does the IPM gets lost if one moves from commodity specific GAPs (as in Thailand) to sector specific GAPs (e.g.: as in FFV EurepGAP)?



### Background to EurepGAP question

Control Points & Compliance Criteria for FFV

Introduction: "EUREPGAP is a means of incorporating IPM and ICM practices within the framework of commercial agricultural production. Adoption of IPM/ICM is regarded by EUREPGAP members as essential for the long-term improvement and sustainability of agricultural production"



### Background to EurepGAP question

Yet ......

Out of 64 control points related to Crop Protection, only 2 refer to IPM. The compliance criteria for these 2 points seem vague/flexible and they are not a Major Must.

Out of 64 control points related to Crop Protection, 8 refer to choice of chemicals. These focus on registration status, suitability according to label, correct application rate, etc.

These 8 points do not comprise a requirement for selection of a relatively less hazardous product within group of permitted products.



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